

## **8 Overview of Current Research Efforts**

### **8.8 Analysis of Weekday/Weekend Differences in Ambient Particulate Nitrate Concentrations and Formation in Southern California - ENVAIR for Coordinating Research Council**

#### **8.8.1 Objectives:**

- 1) Characterize weekday and weekend variations of ambient particulate nitrate and precursor concentrations
- 2) Develop observational evidence supporting or contradicting the hypothesis that lower weekend emissions of  $\text{NO}_x$  lead to lower weekend concentrations of particulate nitrate
- 3) Complement modeling studies and provide information of use for further research on relations among particulate nitrate and its precursors, as well as on the possible side effects of nitrate control strategies on ozone formation

#### **8.8.2 Tasks:**

- 1) Obtain PM, particulate nitrate, and precursor ambient concentrations data. Review accuracy and identify data suitable for further analysis.
- 2) Characterize day-of-week variations of ambient concentrations of PM, particulate nitrate, and nitric acid  $\text{HNO}_3$ .
- 3) Characterize day-of-week variations in ambient concentrations of particulate nitrate precursors and other species of interest, including ozone.
- 4) Investigate relations between ambient concentrations of particulate matter and other species.
- 5) Evaluate where and when particulate nitrate formation is limited by the availability of ammonia.
- 6) Prepare final report and manuscript.

#### **8.8.3 Final Report** (draft completed February 2003 under Coordinating Research Council contract No. A-43c.)

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